Amendments to the Specification

Please add the following heading and sentence as the first sentence of the application following the title:

RELATED APPLICATIONS

This application is a 371 of U.S. Provisional Application No. 60/271,156 filed on February 23, 2001.

Please replace page 6, lines 7-8 with the following rewritten paragraph:

FIG. 8 is a diagram illustrating the processing performed by a mainframe adapter component.~~component~~

Please replace page 7, lines 14-22 with the following rewritten paragraph:

FIG. 1 illustrates the architecture of an electronic payment system 30. The system 30 provides networked merchants (e.g., Internet merchants or retailers) with the ability to receive paperless, electronic check payments ~~check, payments~~ from consumers coupled to the network. Electronic checks cost substantially less to process than credit charges and ~~, and~~ speed the movement of money into the merchant's account relative to paper-based checks. The system 30 includes a consumer or purchaser terminal 32 where the consumer places an order and chooses an electronic check as the form of payment. The order and payment information is transferred to a computer 34, preferably a server, controlled by the Internet merchant.

Please replace page 9, lines 7-19 with the following rewritten paragraph:

If the consumer decides to pay for the product or the service with an electronic check, the system 30 illustrated in FIG. 1 may be utilized. FIGS. 1A and 1B illustrate exemplary payment (data capture) pages as they might appear in the browser (e.g., a web browser such as Microsoft Internet Explorer or Netscape Navigator) of the consumer terminal 32. In one embodiment, the data capture pages acquire information via the web in a secure manner using standard web

interface technologies. FIG. 1A illustrates a page 40 having a dialog box 4442. The dialog box 44 42 includes entry areas for a consumer's name, address (street, city, state, zip code and country), phone number, date of birth, driver's license, and driver's license state. In one embodiment, in an effort to make the process simple and non-redundant, information supplied by the consumer to the merchant at the "checkout" page is automatically entered in the representative entry areas of the dialog box 4442. The consumer may correct information if it is not displayed correctly.

Please replace page 13, lines 3-22 with the following rewritten paragraph:

As shown in FIG. 3, the authorization computer 36 may be designed with various security and backup features, additional hardware to support applications, and hardware to format and route data to the additional hardware. In the example shown, the authorization computer 36 includes a first firewall 140, a primary server 142, a failover server 144, a second firewall 146, and a converter and router 148 that performs integrated data capture and convert ("IDCC") operations and that executes a rules and formatter application 149. The converter and router 148 is connected to a tracking server 150 and an application server 152. A pass-through Java servlet 153 running on the primary server 142 sends the customer's transactional debit data request to a Java server 147 running on the converter and router 148. The Java server 147 places the input request (considered a "transaction" ~~"transaction"~~) into a queue for the rules and formatter application 149 running on the converter and router 148. The rules and formatter application 149 pulls the transactions from its queue one-at-a-time to perform formatting and data conversion operations on each transaction. The rules and formatter application 149 puts the transaction into a queue for the tracking server 150 for creating a log of transactions. A tracking application 154 running on the tracking server 150 creates the log of the transactions, making them available to a transaction inquiry application used for diagnosing transaction problems. Each formatted and converted transaction is routed to the electronic check module 70 running on the application server 152.

Please replace page 20, lines 15-21 with the following rewritten paragraph:

Preferably, the message structure in the mainframe-to-mainframe channel includes a number of tagged or tokenized message components. In this one preferred embodiment, each message component in the request message is made up of the following parts: a 3-byte data length field, a 4-byte data code field, and the subject data. A special CICS transaction identifier may be assigned to the electronic check transactions ~~transaction~~ to differentiate them from other electronic requests, such as identification verification requests (which are discussed below).

Please replace page 28, lines 26-31 and page 29, lines 1-6 with the following rewritten paragraph:

The identity verification module 800 may utilize the first of the two filters to perform fraud indicator searches. Fraud indicator searches may include validation procedures on phone number information (the area code and prefix are compared against a valid list of area code prefix combinations; the standard and extended lists of phone types of the associated area code/prefix are returned when the area code/prefix is not identified as a plain old telephone service ("POTS") number), phone number to zip code information (the area code and prefix of the home phone number are compared to the zip code associated with the billing address), DOB to SSN date of issuance ("DOI") information (the input DOB is compared to the DOI returned from a successful match to the SSN), address to warm address information (the billing address and ship to address are compared against a table of addresses identified as non-residential, non-locations, i.e., mailboxes, prisons, vacant lots, etc.), and the like.

Please replace page 29, lines 7-31 and page 30, lines 1-18 with the following rewritten paragraph:

The identification verification module 800 may utilize the second of the two filters to perform consumer identity validation searches. Consumer identity validation searches may include validation procedures on DL within state (the format of the input DL is compared to the valid format for the given state, the input DL may then be compared to Department of Motor Vehicles ("DMV") files for a hard match if the service is available in the state), SSN/individual

taxpayer identification number ("ITIN") (the input SSN or ITIN is compared to the Social Security Administration valid and/or issued social security groups as well as compared to SSN/ITIN identified as deceased or bogus), DL DOB to SSN DOI (the DOB returned from a successful match to the DL on DMV files is compared to the DOI returned from a successful match to the SSN if the input DOB is different than ~~that~~ the DL DOB), DOB to DL DOB (the input DOB is compared to the DOB returned from a successful match to the DL on DMV files). Consumer identity validation searches may also include validation procedures on the consumer's name. An input name may be compared against a consumer search table of standardized names returning the standardized name. The standardized name will be used in the subsequent matching of name to DL, name to consumer address, name to SSN, name to phone number and name to MICR. A candidate key, based on a fuzzy match algorithm, may also be used in the subsequent matching of name to DL, name to consumer address, name to SSN, name to phone number and name to MICR. Validation procedures may also be performed on a consumer's address to zip code (the consumer address state, city, and zip code are compared within identified geographical identifiers and are standardized; invalid zip codes are corrected in cases where the address, city and state combination is valid as well as a valid postal city name supplied when the zip code and address match within the state); name and address (associations between the name and the billing address are searched using the name and address candidate key); name and DL (associations between the standardized name and the input DL are matched against a cross reference name to DL to identify if prior associations can be found returning the number of sources that were found); name and SSN (the candidate key from the name search and the input SSN or ITIN is matched against a cross-reference candidate key to SSN to identify if prior associations can be found returning the number of sources that were found); name and phone number (the candidate key from the name search and the input home or work phone number is matched against a cross-reference candidate key to phone numbers to identify if prior associations can be found returning the number of sources that were found); name and MICR (the candidate key from the name search and the input MICR is matched against a cross-reference candidate key to MICR (bank code plus demand deposit account ("DDA") account number) to identify if prior associations can be found returning the number of sources that were found); name and address and DOB (the name, address and DOB are compared against each other for a match); MICR and phone number (the MICR and phone number are compared

against each other for a match); MICR and address (the MICR and address are compared against each other for a match); name and address and phone number (the name, address and phone number are compared against each other for a match), etc.

Please replace page 36, lines 22-26 with the following rewritten paragraph:

The converter 1350 may also perform parsing. Parsing may be utilized to break a single name and/or address ~~addresses~~ data field into a number of data fields representative of specific components of the name and/or address (e.g., name parsed into last name, first name, and middle name or initial). Parsing may also correct some address information.

Please replace page 39, lines 3-18 with the following rewritten paragraph:

The matching process is illustrated in FIG. 18. The matching module 1224 of the debit data search engine 1220 performs matching. In one embodiment, the matching module 1224 performs name/address searches, name/previous address searches, name/DL searches, name/phone number searches, name/MICR searches, MICR/phone number searches, and MICR/address searches. The matching process is flexible and may allow for matching based on other data attribute combinations. The entity requesting validation of debit data has the ability to specify which searches it would like performed. The parameters can also specify the order of the searches to be performed. The parameters are submitted to the calling application 1210 along with the data stream. In an alternative embodiment, the parameters can be setup for the entity and utilized whenever the entity submits debit data to be validated. The ability to adjust the parameters allows the entity to specify what searches and what order of searches are optimal for a given transaction. For example, some transactions may receive the SSN only 10% of the time. It is not optimal to perform a SSN search in such a situation. However, if a type of transaction always receives the SSN, a SSN search might be the first search attempted.

Please replace page 40, lines 5-15 with the following rewritten paragraph:

The debit data search engine can use two types of matching: fuzzy matching and hardkey matching. Fuzzy matching compensates for variations in names (e.g., Bob, Robert, Rob), variations in spellings (e.g., Chris, Kris), and miss-spellings (Maple, Mapel). Fuzzy matching allows for the adjustment of matching parameters to make the matching process more or less

stringent. As discussed, the matching parameters may be provided by the entity requesting validation of debit data. Hardkey matching searches for the exact characters with no variation. When using a hardkey matching search, a last name and phone number match does not allow for any variation in the last name or the phone number. These same matching strategies can be utilized in the matching component of the linking process, although it is preferred to utilize the hardkey matching when performing the linking process.
